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ABSTRACT

Relatively few studies of job satisfaction have dealt with sex as a significant variable. Recent studies have determined that Maslow's hierarchy of needs has particular application to the work situation and to an examination of sex differences in intrinsic job satisfaction. A questionnaire based on Maslow's hierarchy was sent to all of the 378 persons who received their post-baccalaureate degrees in adult education from North Carolina State University from 1966 to 1974; 309 (82%) responded producing 292 usable questionnaires. Several characteristics of the population were: one-fourth were females, more than one-half the men and less than one-fourth of the women had their doctorates, almost all were employed full-time with 6.7% of the women and 35.0% of the men receiving incomes over \$21,000. Female adult educators found less gratification of higher level needs than males in the performance of job related tasks. The difference was significant not only with the total need deficiency scores but also with each of the sub-scores that dealt with esteem, autonomy, and self-actualization. The results indicate that higher level need satisfaction in the performance of job-related tasks is meaningful to both female and male adult educators. (JR)

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THE RELATIONSHIP BETWEEN SEX AND
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INTRODUCTION

Traditional sex roles in the home, at work, and in social relationships are being challenged and are undergoing change. Women are no longer accepting en masse their traditional position as the "second sex." Economic and industrial changes have occurred that have removed many production activities from the home and from the domain of women's activities. Recent government studies (Women's Bureau, 1974) indicate that nine out of ten girls today will be employed outside the home at some time in their lives.

In the past, women have been concentrated in non-professional occupations and in only a very few professions, namely nursing, teaching, and library science, those traditionally known as "woman's occupations." In 1940, for example, of the 14 percent of all women workers who were in white collar and professional-technical positions, two out of four were teachers and one out of every four was a nurse (Waldman and McEaddy, 1974, p. 9).

Today, however, many women are moving into non-traditional areas of employment. Highly educated women, in particular, are moving into administrative as well as teaching areas heretofore available primarily to men. Many women are realizing that they have been left far behind not only so far as income is concerned but also in the denial of access to the kinds of positions that offer psychic rewards. Numbers of women of all ages are seeking fulfillment and life satisfaction in careers, many in addition to family life.

As women are moving and will continue to move into non-traditional areas of professional employment, it becomes important

to examine the status of women in such areas. Numerous factors could be considered: salaries, role conflicts, role ambiguity, family adjustments, etc. However, one aspect for study that has often dealt only with males in the past is the element of job satisfaction. In view of the changing patterns of women's employment it seems contemporary and relevant to investigate the job satisfaction of both females and males in professional roles. It has been demonstrated that several factors contribute to the total job satisfaction of an individual. However, the focal point of this study will be that of intrinsic job satisfaction, as it will be herein defined as the gratification of one's higher level needs in the performance of his job-related tasks.

Statement of the Problem and Purpose

The following research question provided a guide for the study: Is there a relationship between sex and the intrinsic job satisfaction of adult educators?

The purpose of the study was to investigate the relationship between sex and the intrinsic job satisfaction of adult educators.

In line with this purpose and under the broad research question (Is there a relationship between sex and the intrinsic job satisfaction of adult educators?), two areas of research questions were subsumed. The first area dealt with need fulfillment, and the following questions were raised:

1. Is there a significant difference in the need fulfillment of females and males?

2. Is there a significant difference in the fulfillment of esteem needs of females and males?
3. Is there a significant difference in the fulfillment of autonomy needs of females and males?
4. Is there a significant difference in the fulfillment of self-actualization needs of females and males?

The second area of questions dealt with ideal expectations, and answers to the following research questions were sought:

1. Is there a significant difference in the ideal expectations of opportunities for need fulfillment between females and males?
2. Is there a significant difference in the ideal expectations of opportunities for esteem need fulfillment between females and males?
3. Is there a significant difference in the ideal expectations of opportunities for autonomy need fulfillment between females and males?
4. Is there a significant difference in the ideal expectations of opportunities for self-actualization need fulfillment between females and males?

Rationale for the Study

Since the turn of the century there have been several thousands of studies conducted in the general area of job satisfaction. Most of these have focused on the blue collar worker and have attempted to relate job satisfaction to productivity. The relatively few job satisfaction studies conducted with professional or management

persons have been done with men only or with scant attention to sex differences in job satisfaction. Many studies of job satisfaction have focused entirely on the situational factors of the job itself (i.e., salary, physical working conditions, co-workers, etc.). "Research on job attitudes in America since the turn of the century has been dominated by perspectives other than those of the worker" (Robinson et al., 1969, p. ii).

This study, on the other hand, has examined the need gratification of the individual in the performance of his job-related tasks, thus bringing together the personality of the worker and the job situation.

In addition to emphasizing the individual and his needs, this study has also focused on sex as the primary independent variable, a variable that has been frequently overlooked in the past.

Theodore writes (1971, p. 1), "Our knowledge about professional women is considerably shrouded in misconceptions that have persisted over a century of time." She says that when sex roles have been examined, they usually have not been studied in relation to occupations; that in studies of professionals, men and women have frequently been considered as one group; that when the female occupational role has been examined it usually has been as it relates to the family subsystem. Theodore does see a new trend in research, however (into which it is hoped that this research falls), and she writes (1971, pp. 1-2) that the

. . . most recent trend involving research on women recognizes the specific occupation, or at least distinguishes between the broader categories of professional and non-professional women. It

also compares males with females. Within this framework the professional woman begins to emerge as a distinctly different role.

Based on her comments, the decision was made to use a specific group of professionals to look at the sex differences in intrinsic job satisfaction. Graduates of the Department of Adult and Community College, North Carolina State University, were selected as subjects for the research.

Further rationale for this study can be found in the phenomenon of changing sex roles in contemporary society. Some have likened the future impact of the present phenomenon of changing sex roles to the impact of the industrial revolution. Of course only time will tell; however, the following quotation (Zeitlin, 1973, p. 257) makes the crucial argument for examining societal phenomena within their historical context:

By the phrase 'real human possibilities' I do not refer to what might be possible in some distant future, but to the possibilities for change and development that promise all of us greater freedom and self-realization. To uncover these possibilities, we must not study man or his conditions in the abstract, as is so frequently done. This can only lead to allegations about 'man's eternal nature' and his 'necessary institutions.' Instead we must grasp the extent to which men's conduct and institutions are rooted in historically specific and transitory social conditions. Any sociology failing to recognize the historical character of society and its forms is bound to conceal from our view what is most essential. We must not deal with one frozen moment of a process but with the process itself.

BACKGROUND

Relatively few studies of job satisfaction have dealt with sex as a significant variable. Several recent articles refer to the inclusion or lack of inclusion of women in research samples. Stoll (1974, pp: 69-70) writes:

Unpublished research on psychology by Prescott, Foster, and Schwabacher noted the underuse of women subjects and explored reasons for it. Curiously, they found that studies of men only generalized their results to both sexes, while the studies of women restricted their conclusions to females as a group.

Holmes and Jorgensen (1971) made an analysis of a sample of issues of three academic journals; their analysis supported the contention that male subjects were over-represented in studies. They suggest that generalizing the results of studies in which the typical subject is the male college student to the female population in general is "on shaky ground." Finally, in 1972 a report was submitted to the Secretary of Health, Education, and Welfare which revealed the same finding, an over-representation from male-only samples with resulting generalization to the whole population (males and females). The report states (Commissioner's Task Force, 1974, p. 20):

The tendency of educational researchers to focus on males makes designing educational programs that meet women's needs much harder. A great deal of research has been undertaken on the theory that the knowledge gained can eventually be put to use in changing educational practice. Biased research cannot help but lead to biased educational approaches.

Kimmel (1969) discusses from an historical point of view the general topic of research on work and the worker in the United States. He points out that social scientists have used three different research perspectives to analyze work and the worker in the United States: studies

7

designed to increase production; studies of attitudes and motives of the workers, still, however, designed to improve production for the employer; and finally, studies that suggest that happiness or job satisfaction are worthy ends in themselves.

Many factors contribute to job satisfactions; although they may be overlapping, such factors as supervision, working conditions, wages, opportunities for advancement, security, benefits, and intrinsic satisfaction are commonly listed by writers and researchers as the components of job satisfaction. It is the element of intrinsic job satisfaction that is considered in this research. In 1957, Herzberg and his co-authors concluded the following from their review of literature dealing with the needs of the worker (p. 70):

The importance of job factors is very much bound up with individual needs, so much so that future research which does not attempt to relate job factors to employee needs will be of extremely limited value.

Kazanas et. al. (1973, p. 57) surveyed the literature on job satisfaction and concluded that in the future, concerns with the nature of work will deal with the humanizing of work. They also concluded (among other conclusions) that people will look increasingly for jobs that will provide for the gratification of their personal needs. Gross and Napier (1967, p. 2--8) define intrinsic job satisfaction as follows: the degree of gratification that one derives from performing his work-related tasks. They write:

Psychologists have long maintained that the degree of gratification men derive from their conduct, whether at work or play, can be attributed to the extent to which it permits them to fulfill their basic wants or needs.

Among others who have examined job satisfaction in terms of need

fulfillment are Schaffer (1953), Roe (1956, 1970), Porter (1962, 1963), Hulin and Smith (1964), Blai, Jr. (1964, 1974), Abbott (1965), Alderfer (1969, 1972), Suziedelis and Steimel (1970), Huizinga (1970), Neff (1968), and Seashore (1974).

The existence of the phenomenon of intrinsic job satisfaction and its importance are obvious. However, methods of determining and measuring intrinsic job satisfaction are not so obvious. It seems, however, that with the preponderance of the writing on intrinsic job satisfaction dealing with individual needs, that Maslow's hierarchy of needs might indeed provide insight into the examination of intrinsic job satisfaction.

Maslow's Hierarchy of Needs

Maslow writes that needs are gaps between a present condition and a desired (or prescribed) condition; needs may be physiological, psychological, or social. Needs are motivators of behavior. Whenever one need is satiated, another need arises to motivate man's actions. Maslow writes (1970, p. 24), "Man is a wanting animal and rarely reaches a state of complete satisfaction except for a short time." Frequently these needs are referred to as basic needs, and Maslow's definition of "basic" as "characteristic of the whole human species" (1951, p. 257) is important here.

Maslow contends that man's needs can be ranked in a hierarchy, that there is a specific sequence or development of needs. Furthermore, he says that once lower level needs are satisfied, they are no longer motivators of behavior; however, when the lower level needs are satisfied, new and higher needs emerge. The needs at the lowest

level of the hierarchy are the physiological needs, such as hunger, thirst, and sex; the next level of needs is described by Maslow as safety needs, such as security, protection, and freedom from fear. At the third level one finds the belongingness and love needs emerging when both of the lower level needs are fairly well gratified. At the fourth level one finds the esteem needs. Maslow writes that all people (with the exception of a few pathological cases) have a need for self-respect and for the esteem of other people. He classifies this need in two sets, that of the desire for achievement confidence, and independence, and that of the desire for reputation, prestige, and recognition. Maslow writes (1970, p. 45):

Satisfaction of the self-esteem need leads to feelings of self-confidence, worth, strength, capability, and adequacy, of being useful and necessary in the world. But thwarting of these needs produces feelings of inferiority, of weakness, of helplessness.

The fifth, or highest level need, is the need for self-actualization, the desire for fulfillment. Maslow writes (1970, p. 46): "This tendency might be phrased as the desire to become more and more what one idiosyncratically is, to become everything that one is capable of becoming." He also writes (1971, p. 50):

... we see that self-actualization is not a matter of one great moment. It is not true that on Thursday at four o'clock the trumpet blows and one steps into the pantheon forever and altogether. Self-actualization is a matter of degree, or little accessions accumulated one by one.

Maslow writes that at the level of self-actualization needs individual differences are the greatest; the emergence of the need for self-actualization usually depends upon at least partial

fulfillment of the physiological, safety, love, and esteem needs. Maslow points out, however, that lower level needs need not be 100 percent satisfied before a higher level need emerges as a motivator of behavior. He also indicates that the emergence of a higher need level is a gradual and not a sudden event (Maslow, 1970, pp. 53-54).

Some people have interpreted the Maslow hierarchy of needs in the shape of a pyramid. However, perhaps a more true representation of the Maslow hierarchy of needs is seen in the diagram of Krech et al. (1974, p. 462) in which the need levels are pictured as overlapping waves.

Recently, organizational theorists have considered the importance of Maslow's hierarchy of needs in the development of organizational structure and goals. Argyris writes (1957, p. 53) that healthy adults will seek positions in organizations wherein they can be active rather than passive, independent rather than dependent, focus on long-range rather than short-range objectives, and "have control over their world." Argyris concludes (1957, p. 53):

These developmental trends may be considered as basic properties of the human personality. They are the 'givens' that an administrator accepts the moment he decides to accept human beings as agents of the organization.

Lichtman and Hunt write of the universality of the Maslow hierarchy of needs and its implication for organizational structure (1971, p.

276):

Maslow specified a need hierarchy common to all normal people and consisting, in ascending order, of safety and survival needs, social needs, ego needs, autonomy needs (these latter two usually combined into esteem needs), and self-actualization needs. A higher-level need cannot

be satisfied until the needs below it in the hierarchy have been served. Maslow argued that it is universally true that all manner of human activity is an attempt to work upward in the hierarchy. Using this basic notion, modern structural theorists feel that since membership in a work organization is a central fact in men's lives, it is to the best interest of the organization and the people in it to alter the organization's structure to allow for the human quest for self-actualization.

There are a number of people who argue that because of the difficulty of operationalizing the Maslovian hierarchy of needs as well as for other reasons it is not a valid theory and that furthermore it is a "myth" that perpetuates the inequalities of society.

Strauss writes, for example (1974, pp. 79-80):

The Maslow scheme is highly flattering to professors and managers, two occupations which place great value on self-actualization. Nevertheless, in its over-simplified form, it can be criticized on a number of grounds. For example, the scheme is stated in a non-operational manner which makes it very difficult to prove or disprove (especially since most forms of human behavior satisfy more than one need). Further, there may be substantial differences among people in the relative weight they give to the 'basic' (physical, safety, and social) needs as against the 'higher' level ones, such as esteem and self-actualization.

Another interesting criticism of Maslow's hierarchy of needs and his writings in general comes from Kasten (1972, p. 29), who claims that Maslow's writings are sexist, that he makes "a hodgepodge of inconsistent and ambivalent statements about women and sex roles" However, it seems overwhelmingly clear to this researcher that whereas Maslow may have struggled with some traditional sex role stereotypes and expectations, that when he speaks of basic human needs he is indeed speaking of all persons, male and female.

With regard to the importance of a particular set of needs, Maslow writes that an individual yearns consciously for that which he might conceivably attain. He says (1970, p. 13):

As a man's income increases he finds himself actively wishing for and striving for things that he never dreamed of a few years before. The average American yearns for automobiles, refrigerators, and television sets because they are real possibilities; he does not yearn for yachts or planes because they are in fact not within the reach of the average American. It is quite probable that he does not long for them unconsciously either.

Attention to this factor of possibility of attainment is crucial for understanding the differences in motivations between various classes and castes within our own population and between it and poorer countries and cultures. (Underlining added.)

Haney writes, in support of the same idea (1967, p. 135):

It can be argued that some people seem to be quite content to attain a modicum of satisfaction at the lower two or three levels. They seem to have no 'ambition,' no drive to 'get somewhere' or to 'be somebody.' Is it possible that these people were 'behind the door when the needs were passed out'? Not likely. But it is quite possible that they have learned not to try to satisfy some of their needs.

The idea of conceivable attainment as presented by Maslow and discussed by Haney has been applied to the status of women in society.

Several contemporary writers have sought to interpret the Maslovian hierarchy of needs as it might apply to women in these times of changing sex roles (to be discussed further later in this chapter). Firedan writes (1963, pp. 303-304):

In our culture, the development of women has been blocked at the physiological level with, in many cases, no need recognized higher than the need for love or sexual satisfaction.

If women's needs for identity, for self-esteem, for achievement, and finally for expression of her unique human individuality are not recognized by herself or others in our culture, she is forced to seek identity and self-esteem in the only channels open to her: the pursuit of sexual fulfillment, motherhood, and the possession of material things. And, chained to these pursuits, she is stunted at a lower level of living, blocked from the realization of her higher human needs.

Huyck (1972, p. 2)¹, as well as Friedan, writes of the notion that traditionally women have been considered to possess only the lower level needs. Huyck writes:

We have been told for a long time that women need to feel loved and they need to belong to someone, and we have been told that and it is true; those are human needs. The problem is that often the assumption is that women's needs have stopped there. Now that is level three (of Maslow's hierarchy) and there are two more levels to go.

A study of gifted women and men by Norma Groth points out that many women who previously had filled more traditional female roles began at about age forty to seek the Maslovian ideal of self-actualization (Loring and Wells, 1972, p. 34).

The results of a study of male and female college students point out individual differences along both the male and female respondents and overall similarities between the male and female responses to factors that they would consider most important in their first jobs. Singer writes (1974, p. 362):

¹Huyck, Margaret. 1972. The psychological needs of women. Unpublished paper. Department of Psychology, Illinois Institute of Technology, Chicago, Illinois.

Females and males are primarily looking for jobs in which they can learn, accomplish something worthwhile, and work with friendly and congenial co-workers. These similarities in male and female job-related needs should serve notice to employers that the sex-work-role stereotypes prevalent in the past three decades are no longer indicative of college students about to enter today's job market.

A recent study by Crowley, Levitin, and Quinn revealed that men and women are approximately equally concerned with having meaningful work that provides opportunity for self-realization and personal gratification. Their study also revealed that women are equally as dissatisfied as men with jobs that are intellectually unstimulating (1973, p. 95).

Research by Richardson (1974) showed that career oriented college women are seeking intrinsic rather than extrinsic satisfaction from work.

Other contemporary authors and researchers make the point that women today are experiencing the higher level needs. Shatto (1975, p. 23) writes that people usually 'grow' as they occupy higher level positions, but that in the past it was assumed that only men could grow in this way. Ginzberg's 1963 study of 311 women who had had at least one year of graduate study found that many women indicated the importance of opportunities for self-realization. However, he concluded that he found little in his research to indicate that most educated women were frustrated in the gratification of their needs (1966, p. 143).

On the other hand, Yankelovich (1974, pp. 29-30) writes:

Women have always worked for economic reasons, but now, superimposed on the economic motive, is the powerful psychological force of

self-realization. Its effects are changing work values almost as much as they are changing the nature of the family.

He continues by discussing three psychological benefits that all people want to derive from their jobs, namely the opportunity to advance; the desire to do a good job, and the

. . . yearning to find self-fulfillment through 'meaningful work.' By meaningful work people usually mean: (1) work in which they can become involved, committed, and interested; (2) work that challenges them to the utmost of their capabilities; and (3) participation in decision-making. (1974, pp. 35-36)

Maslow writes that a person's capacities, or aptitudes, clamor to be used; in other words, a person's capacities are also needs.

He says:

Not only is it fun to use our capacities, but it is also necessary for growth. The unused skill or organ can become a disease center or else atrophy or disappear, thus diminishing the person. (1968, p. 201)

Maslow's hierarchy of needs, then, does indeed appear to have universal appeal. As has been shown, it has particular application to the work situation, and it also has particular application in looking at sex differences in intrinsic job satisfaction.

Examination of existing studies utilizing instruments based on Maslow's hierarchy of needs revealed no survey instrument that seemed adequate for use in this study. The thirteen item questionnaire created by Porter (1962) and used by him and others offered some basis for the design of the instrument used herein. Items dealing with the higher level needs (esteem, autonomy, and self-actualization) were prepared by this researcher and submitted to a panel. On the basis of panel rankings, eight items for each need level were retained. Further modifications of the questionnaire resulted from preliminary testing, pre-testing, and a factor analysis of the pre-test. The final form of the questionnaire contained twenty-four items repeated (in randomized fashion) in two sections; the first section asked how much of the particular quality or characteristic was now associated with the individual's job-related tasks; the second section asked how much of the particular quality or characteristic there should be associated with his job-related tasks. Responses were indicated on a scale from one to seven, with one being low and seven being high.

The following is a presentation of the twenty-four items, not as they appeared in the questionnaire but in their three groupings. (Numbers represent the number of each item as it appeared in part two of the questionnaire.)

Esteem Items

- D6 The recognition of my accomplishments by others.
- D8 The prestige of my position within the organization.
- D1 The feeling of self-confidence that I get from performing my job-related tasks.
- D7 The feeling that my work is appreciated.
- D24 The feeling of acceptance into the informal social structure of the organization.
- D20 The feeling that my ideas are received and utilized by others.
- D23 The prestige of my position outside of the organization.
- D18 The belief that the performance of my job-related tasks is a useful contribution to my organization.

Autonomy Items

- D2 The freedom that I have in performing my job-related tasks.
- D13 The opportunity for involvement in the goal-setting process of the organization.
- D19 The feeling that I am able to work out solutions to problems on my own.
- D11 The opportunity to perform tasks that I want to perform.
- D15 The feeling of responsibility generated by carrying out my job-related tasks.
- D10 The opportunity to assume leadership responsibilities.
- D4 The opportunity for participation in the decision-making process of the organization.
- D14 The opportunity to exercise independent thought and action.

Self-Actualization Items

- D9 The feeling that my job-related tasks are challenging to me.
- D12 The opportunity to "be myself," to express my opinion.
- D21 The feeling of progress toward my occupational goals.
- D17 The opportunity for creative thinking.
- D3 The opportunity for my individual growth and development.
- D16 The feeling that I am continually learning from my work.
- D5 The feeling of worthwhile accomplishment.
- D22 The feeling that I am using my unique abilities.

Although the design of the questionnaire does not limit its use to adult educators, it was the purpose of this study to examine the intrinsic job satisfaction of adult educators. Of special interest was the entire population of 378 persons who had received degrees in either the master's or doctoral programs of the Department of Adult and Community College Education of North Carolina State University between the years 1966 and 1974.

Eighty-two percent (309 out of 378 total) returned questionnaires. Of these, five were incomplete and unusable. Another twelve were returned unanswered because the respondent was not currently employed. Of these twelve, five were students, five were homemakers, and two were retired. Ninety-four percent of the 309 returned questionnaires, or 292, were utilized in the data analysis.

Since this study dealt with a population rather than with a sample, the standard error of the difference was used to determine the significance of difference between mean scores. If the difference in the mean scores of female and males was greater than one and one-half times the standard error of the difference, it was considered significant.

In computing the mean scores and sub-scores, the following procedure was used. Each item's need deficiency score was obtained by subtracting the item score on part one of the questionnaire (How much is there now?) from the item score on part two (How much should there be?). Total mean need deficiency scores were compared as well as the mean sub-scores.

RESULTS

A general overview of respondents' characteristics is first presented. This overview is followed by the findings from the testing of the hypotheses.

General Overview

Sex

Of the 292 respondents in this study, 75, or one-fourth, were females. Two hundred seventeen, or three-fourths, were males.

Age

Seventy persons, or nearly one-fourth, were in the age category 24-36 years. Seventy-eight persons, or slightly over one-fourth, were in the age category 37-42 years. Seventy-four persons, or one-fourth, were in the age category 43-49 years. Seventy persons, or nearly one-fourth, were in the age category 50-64 years.

Marital Status

Of the 292 respondents, 244 persons, or about five out of six, were married, and 48 persons, or one-sixth, were single, divorced, widowed, or separated. Ninety-five percent of the males were married, but only slightly more than half of the females were married.

Race

Of the respondents, 271, or thirteen in fourteen, were white; twenty-one persons, or one in fourteen, were non-white. Almost 90 percent of the females were white, and 95 percent of the males were white.

Table 1. Age of respondents

Age	Females		Males		Total	
	Number	Percent	Number	Percent	Number	Percent
With Percentages of Total (N = 292)						
24-36 years	21	(7.19)	49	(16.78)	70	(23.97)
37-42 years	17	(5.82)	61	(20.89)	78	(26.71)
43-49 years	22	(7.53)	52	(17.81)	74	(25.34)
50-64 years	<u>15</u>	<u>(5.14)</u>	<u>55</u>	<u>(18.84)</u>	<u>70</u>	<u>(23.98)</u>
Total	75	(25.68)	217	(74.32)	292	(100.00)
With Percentages by Sex ($N_1 = 75$; $N_2 = 217$)						
24-36 years	21	(28.00)	49	(22.58)		
37-42 years	17	(22.67)	61	(28.11)		
43-49 years	22	(29.33)	52	(23.96)		
50-64 years	<u>15</u>	<u>(20.00)</u>	<u>55</u>	<u>(25.35)</u>		
Total	75	(100.00)	217	(100.00)		

Table 2. Marital status of respondents

Marital Status	Females		Males		Total	
	Number	Percent	Number	Percent	Number	Percent
With Percentages of Total (N = 292)						
Married	39	(13.36)	205	(70.21)	244	(83.57)
Single ^a	36	(12.33)	12	(4.11)	48	(16.44)
With Percentages by Sex (N ₁ = 75; N ₂ = 217)						
Married	39	(52.00)	205	(94.47)		
Single ^a	36	(48.00)	12	(5.53)		

^aIncludes single, divorced, widowed, separated.

Table 3. Race of respondents

Race	Females		Males		Total	
	Number	Percent	Number	Percent	Number	Percent
With Percentages of Total (N = 292)						
White	66	(22.60)	205	(70.21)	271	(92.81)
Non-white	9	(3.08)	12	(4.11)	21	(7.19)
With Percentages by Sex (N ₁ = 75; N ₂ = 217)						
White	66	(88.00)	205	(94.47)		
Non-white	9	(12.00)	12	(5.53)		

Degree

Of the 292 respondents, 158 had received the master's degree, and 134 persons had received the doctorate. Fewer than one-fourth of the women had received the doctorate, whereas more than one-half of the men had received the doctorate.

Year of Degree

Of the 292 respondents, 117 had received their degrees before 1970, and 175 persons had received their degrees since 1970. (Although 1975 graduates were not officially included in this study, two persons who received the doctorate in 1975 were included because they had received an earlier degree in the Department of Adult and Community College Education.) Two-fifths of the respondents received degrees before 1970; three-fifths received their degrees in 1970 or later. Percentages of females and males were consistent with total percentages.

Years of Experience before Graduate Study

Ninety-six persons, or nearly one-third, had up to six years of related experience before beginning graduate study at North Carolina State University. One hundred nine persons, about three out of eight, had seven to fourteen years of related work experience prior to graduate study. Eighty-seven persons, or about two out of seven persons, had fifteen or more years of related work experience before beginning graduate study at North Carolina State University. Percentages of females and males were consistent with total percentages.

Employment Status

Of the 292 respondents, 284, or 97.26 percent, were employed full-time. Only eight persons were employed part-time. Percentages of females and males were consistent with total percentages. (Reference was made earlier to the number of persons not now employed who returned the questionnaire.)

Employing Organization

Two hundred seventy-four persons, or 93.84 percent of the respondents, were employed in one of four classes of organizations. Seventy-eight persons, a little over one-fourth, were employed in community colleges (or technical institutes). One hundred twenty-three persons, or about three out of seven, were employed in Agricultural/Cooperative Extension Service. Thirty-three persons, or one out of nine, were employed by colleges and universities; forty persons, or one out of eight, were employed by governmental agencies (at all levels) or public schools; and eighteen persons, or one out of sixteen, were employed by voluntary organizations, private industry or were self-employed. The percentages by sex show proportionately higher concentrations of females in Agricultural/Cooperative Extension and in the governmental agencies and public schools.

Table 4. Employing organization

Employing Organization	Females		Males		Total	
	Number	Percent	Number	Percent	Number	Percent
With Percentages of Total (N = 292)						
Community college ^a	12	(4.11)	66	(22.60)	78	(26.71)
Ag./Coop. Extension	38	(13.01)	85	(29.11)	123	(42.12)
College or university	3	(1.03)	30	(10.27)	33	(11.30)
Governmental agencies ^b	17	(5.82)	23	(7.88)	40	(13.70)
Other	5	(1.71)	13	(4.45)	18	(6.16)

With Percentages by Sex ($N_1 = 75$; $N_2 = 217$)

Community college ^a	12	(16.00)	66	(30.41)
Ag./Coop. Extension	38	(50.67)	85	(39.17)
College or university	3	(4.00)	30	(13.82)
Governmental agencies ^b	17	(22.67)	23	(10.60)
Other	5	(6.67)	13	(6.00)

^aIncluding technical institutes.^bIncluding all levels of governmental agencies and public schools.

Major Job Responsibility

Almost half of the respondents (145) indicated that their major job responsibility was administration. A little over one-fifth (64) indicated program development as their single most important job responsibility. About two of every eleven respondents (53) indicated teaching as their major job responsibility; ten respondents (3.43 percent) indicated teaching and research; and twenty respondents (6.85 percent) indicated counseling, recruiting, or other primary job responsibilities. The percentages by sex show that percentages of females were rather equally distributed among administration, program development, and teaching, whereas almost three out of five males were engaged in administration.

Years of Experience in Primary Job Responsibility

One hundred thirty-three persons, or 45.55 percent, indicated that they had had this primary job responsibility for less than six years. Seventy-one persons, or 24.31 percent, had held this primary job responsibility for six to ten years; and 88 persons, or 30.14 percent, had had their primary job responsibility for eleven years or more. A higher percentage of women than of men had had their primary job responsibility for eleven or more years.

Table 5. Major job responsibility

Major Job Responsibility	Females		Males		Total	
	Number	Percent	Number	Percent	Number	Percent
With Percentages of Total (N = 292)						
Administration	21	(7.19)	124	(42.47)	145	(49.66)
Program development	20	(6.85)	44	(15.07)	64	(21.92)
Teaching	23	(7.88)	30	(10.27)	53	(18.15)
Teaching/ research	1	(0.34)	9	(3.08)	10	(3.42)
Other	10	(3.42)	10	(3.42)	20	(6.84)

With Percentages by Sex ($N_1 = 75$; $N_2 = 217$)

Administration	21	(28.00)	124	(57.14)
Program development	20	(26.67)	44	(20.28)
Teaching	23	(30.67)	30	(13.82)
Teaching/ research	1	(1.33)	9	(4.15)
Other	10	(13.33)	10	(4.61)

Income

Forty-six respondents, or 15.75 percent, reported incomes of less than \$13,000. One hundred sixty-five respondents, or 56.51 percent, reported incomes from \$13,000 to 20,999. Eighty-one respondents, or slightly more than one-fourth, reported incomes of \$21,000 or more. Forty percent of the females received less than \$13,000, and 7.37 percent of the males received incomes less than \$13,000. On the other hand, 6.67 percent of the women received incomes over \$21,000, and 35.02 percent of the males received incomes over \$21,000.

Testing the Hypotheses

The major purpose of this study was to examine the relationship between sex and intrinsic job satisfaction of adult educators. The questionnaire used in the study dealt with the respondents' perceptions of need fulfillment qualities or characteristics associated with their job-related tasks. The scoring of the questionnaires and the use of the scores and sub-scores in the testing of the hypotheses have been explained in detail in chapters two and three.

Hypothesis I

There will be no difference in need fulfillment deficiencies between females and males.

When the difference in the mean need deficiency scores of females and males was subjected to comparison with the standard error of the difference, a significant difference (greater than one and one-half times the standard error of the difference) was found. Data for this hypothesis are presented in Table 10.

Table 6. Income levels of respondents

Income Level	Females		Males		Total	
	Number	Percent	Number	Percent	Number	Percent
With Percentages of Total (N = 292)						
Less than \$13,000	30	(10.27)	16	(5.48)	46	(15.75)
\$13,000-\$20,999	40	(13.70)	125	(42.81)	165	(56.51)
\$21,000 and over	5	(1.71)	76	(26.03)	81	(27.74)
With Percentages by Sex ($N_1 = 75$; $N_2 = 217$)						
Less than \$13,000	30	(40.00)	16	(7.37)		
\$13,000-\$20,999	40	(53.33)	125	(57.60)		
\$21,000 and over	5	(6.67)	76	(35.02)		

Table 7. Means of need deficiency scores and sub-scores
($N_1 = 75$; $N_2 = 217$)

Need Area	Females	Males	S.D. ^a	d ^b	s _d ^c
Total	26.65	20.86	20.98	5.79 ^d	2.81
Esteem	8.51	6.88	7.32	1.63 ^d	.98
Autonomy	8.83	6.51	7.56	2.32 ^d	1.01
Self-actualization	9.32	7.47	7.91	1.85 ^d	1.06

^aS.D. is standard deviation.

^bd is difference of the means.

^cs_d is standard error of the difference.

^dIndicates significant difference.

In the case of Hypothesis I, the null hypothesis of no difference in the means was rejected, and the research hypothesis that females will experience greater need fulfillment deficiencies than males was therefore supported.

Hypothesis Ia.

In the fulfillment of esteem needs, there will be no difference in the need fulfillment deficiencies between females and males.

When the difference in the mean need deficiency sub-scores relating to esteem was subjected to comparison with the standard error of the difference, a significant difference was found. Data for this hypothesis are presented in Table 10.

In the case of Hypothesis Ia, the null hypothesis of no difference in the means was rejected, and the research hypothesis that females will experience greater need fulfillment deficiencies in the area of esteem than males was therefore supported.

Hypothesis Ib.

In the fulfillment of autonomy needs, there will be no difference in the need fulfillment deficiencies between females and males.

When the difference in the mean need deficiency sub-scores relating to autonomy was subjected to comparison with the standard error of the difference, a significant difference was found. Data for this hypothesis are presented in Table 10.

In the case of Hypothesis Ib, the null hypothesis of no difference in the means was rejected, and the research hypothesis that females will experience greater need fulfillment deficiencies in the area of autonomy than males was, there supported.

Hypothesis Ic.

In the fulfillment of self-actualization needs, there will be no difference in need fulfillment deficiencies between females and males.

When the difference in the mean need deficiency sub-scores relating to self-actualization was subjected to comparison with the standard error of the difference, a significant difference was found. Data for this hypothesis are presented in Table 10.

In the case of Hypothesis Ic, the null hypothesis of no difference in the means was rejected, and the research hypothesis that females will experience greater need fulfillment deficiencies in the area of self-actualization than males was therefore supported.

The second set of hypotheses dealt with the ideal expectations of need fulfillment opportunities in one's job-related tasks. It was hypothesized that there will be no difference in the ideal expectations of females and males, i.e., that females as well as males will expect opportunities for higher level need fulfillment in the performance of their job related tasks.

Hypothesis II

There will be no difference in the ideal expectations of need satisfaction between female and male respondents.

When the difference in the ideal expectations score was subjected to comparison with the standard error of the difference, no significant difference was found.

In the case of Hypothesis I, the null hypothesis of no difference in the means (and in this case also the research hypothesis) was accepted.

Table 8. Means of ideal expectations scores and sub-scores
($N_1 = 75$; $N_2 = 217$)

Need Area	Females	Males	S.D. ^a	\bar{d} ^b	s_d ^c
Total	155.20	154.22	12.23	.98	1.64
Esteem	50.89	50.24	5.10	.65	.68
Autonomy	51.32	51.41	4.40	.09	.59
Self-actualization	52.99	52.56	4.02	.43	.54

^aS.D. is standard deviation.

^b \bar{d} is difference of the means.

^c s_d is standard error of the difference.

Hypotheses IIa, IIb, IIcHypothesis IIa.

In the ideal expectations of the satisfaction of esteem needs, there will be no difference in the ideal scores between females and males.

Hypothesis IIb.

In the ideal expectations of the satisfaction of autonomy needs, there will be no difference in the ideal scores between females and males.

Hypothesis IIc.

In the ideal expectations of the satisfaction of self-actualization needs, there will be no difference in the ideal scores between females and males.

In each case the sub-score was subjected to comparison with the standard error of the difference. No significant differences were found. (See Table 11.)

For Hypotheses IIa, IIb, IIc, the null hypotheses of no difference in the means (and in these cases also the research hypotheses) were accepted.

DISCUSSION

Female adult educators found less gratification of higher level needs than males in the performance of their job-related tasks. The difference was significant not only with the total need deficiency scores but also with each of the sub-scores that dealt with esteem, autonomy, and self-actualization. The greatest need deficiency area for females was in the area of autonomy needs.

In the case of the ideal expectations scores, there were no significant differences between women and men, either in the case of total scores or in the case of the sub-scores dealing with esteem, autonomy, and self-actualization.

This study has reinforced the earlier evidence that it would have been inaccurate to have surveyed only male educators and then generalized to females; it would also have been inaccurate to have surveyed the graduates of the department and not have considered sex as a variable. This research re-emphasizes the need for including females in social science research projects. It should be ascertained by educators and administrators who plan and implement programs of adult education that they are not making decisions pertaining to hiring, program planning, etc., on the basis of biased studies.

It can also be seen from the results of this research that higher level need satisfaction in the performance of job-related tasks is meaningful to both female and male adult educators. Adult education administrators and teachers alike must be aware that professionally trained persons of both sexes are seeking jobs that offer opportunities to gratify higher level needs, including those of self-actualization.

Also, graduate school administrators, organizational administrators, and program planners must examine their own roles, their sex role expectations, and their attitudes. Traditional sex role expectations may not be realistic in dealing with the contemporary female professional. Female adult educators must examine their own sex role expectations (for themselves as well as for others) and their own attitudes. Women have not been socialized to be assertive, and perhaps they need to be more skilled at verbalizing and expressing their needs to administrators and co-workers.

It must be pointed out that here, as in all comparative studies, the findings are not absolute. In other words, they are not to be interpreted that female adult educators are dissatisfied in the higher level need areas and that male adult educators are satisfied, but that relatively speaking, female graduates of the department are finding less satisfaction of their higher level needs than male graduates.

Women have long been practitioners and participants in the field of adult education; however, the results of this research concur with contemporary writings that indicate that professionally trained women as well as men are seeking gratification of higher level needs in their jobs through the performance of more creative, responsible, and challenging tasks.

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